# MONTGOMERY COUNTY GOVERNMENT ROCKVILLE, MARYLAND CLASS SPECIFICATION

Code No. 004022 Grade 25

### **ENGINEER III\***

#### **DEFINITION OF CLASS:**

This is full performance professional level engineering work. Contacts are with engineers, architects, contractors, consultants, and related County personnel to exchange information, plan and coordinate operational matters, resolve problems, and provide advice and/or guidance. Public service in this class is limited to the provision of information and guidance incidental to the primary purpose of the job.

Employees in this class perform complex assignments requiring the use of a wide range of engineering principles and practices specific to their assigned area. Employees in this class independently plan and carry out assignments based on overall objectives. Work is reviewed for meeting requirements or expected results. Guidelines, including industry standards, local and National codes, regulations, and statutes, are normally available but do not cover all situations encountered in the work. The work involves a wide range of processes and methods, and involves the assessment of unusual circumstances and interpretation of conflicting data such as in review of the construction plans and designs subject to a variety of codes and regulations. The scope of the work involves engineering projects from conception through final acceptance of design, or in other assignments through construction to final acceptance, and affects County wide services, structures, and facilities. The work requires employees to visit sites to make field investigations, conduct surveys, and/or observe and/or inspect construction. Hazards include those requiring the use of hard hats, eye protection, and reflective vests worn when working in moving traffic. Physical effort involves occasional standing for long periods and/or walking over rough and uneven constructions sites, and occasional stooping, bending, reaching and climbing at construction sites.

Employees in this class do not ordinarily perform supervisory functions although as full performance engineers are expected to provide leadership, mentoring and guidance to less experienced engineers.

# **EXAMPLES OF DUTIES: (Illustrative Only)**

## **Depending on area of assignment:**

- Prepares engineering designs for projects of varying size and complexity.
- Reviews plans submitted by developers and other public and/or private organizations to determine if the plans and projects meet required laws, regulations and ordinances.
- Reviews plans submitted by Architectural and Engineering (A&E) firms to determine if they meet design requirements, and for cost and compatibility with County standards and guides.
- Performs field investigations, including land surveys, to collect and analyze data regarding engineering proposals, and conducts analyses, research and other studies to determine feasibility and costs of such proposals.
- Performs project management work, taking full day to day responsibility for part of a very large project
  or entire responsibility for a smaller project or program. Works with A&E firms in developing and
  finalizing designs; participates in letting projects for bid; monitors work of contractors engaged in
  constructing engineering projects; visits sites to observe work and to inspect (or have inspected)

materials used in construction; confers with contractors regarding schedules, safety measures, site problems, and delays; reviews and recommends on requests for changes and processes other paperwork, prepares project reports and maintains project records and files.

- Prepares formal bid documents for engineering projects; compiles and assembles bid information including plans and drawings, specifications, cost estimates, schedules and contract provisions.
   Administers contracts by reviewing invoices for payment and processing related contract documents.
- Conducts environmental studies of proposed development/construction to determine effects of such development on groundwater resources and other aspects of the environment.
- Advises the public and others regarding engineering policies and requirements for construction and assists such persons on such matters as regulatory compliance, County policies and procedures.
- Initiates correspondence and other communications with developers, designers, contractors, property owners, other governmental agencies and the general public in response to requests for information, to explain legal/regulatory requirements, or to provide technical assistance.
- As assigned, participates in meetings, work groups and task forces formed to deal with engineering related projects and issues; compiles information and conducts research for such activities and participates in discussions, presentations and report writing resulting from such activities.
- Attends public hearings to present and defend proposals; attends community/neighborhood organization
  meetings to explain Department policies and programs, and to respond complaints and requests for
  service.
- Confers with developers, A&E staff, contractors and their representatives regarding issues arising in the
  course of planning and completing projects, and negotiates agreements with such entities to resolve
  matters.
- Performs related work as required.

### KNOWLEDGE, SKILLS AND ABILITIES:

- Considerable knowledge of and the ability to apply modern principles and practices of engineering to which the position is assigned.
- Knowledge of the principles, policies, and practices of contract administration in order to prepare
  contract documents such as scope of work and technical specifications, review and rate proposals,
  provide engineering support during negotiations, and oversee contractors' work.
- Knowledge of applicable codes, statutes, and regulations related to the assigned engineering field.
- Knowledge of computer engineering applications and models.
- Ability to work with coworkers and County employees to interpret requirements and discuss problems to achieve agreements.
- Ability to prepare written reports, contract documentation, records of unit activities, and correspondence.
- Ability to lead, mentor and guide other technical staff.
- Ability to independently conduct field investigations and inspections in environmental conditions that present moderate discomforts and risks.
- Ability to attend meetings or perform other assignments at locations outside the office.

### **MINIMUM QUALIFICATIONS:**

**Experience:** Three (3) years of experience in an engineering field appropriate to the assigned position. **Education:** Graduation from an accredited college or university with a Bachelor's Degree in engineering, or a related discipline appropriate to the assigned position. Registration as a Professional Engineer may

substitute for the degree.

**Equivalency:** An equivalent combination of education and experience may be substituted, provided such combination includes at least sixty (60) accredited semester hours (or an equivalent amount of accredited professional training) in engineering or related courses appropriate to the assigned position.

### LICENSE:

• Some positions may require possession and maintenance at all times of a valid Class "C" (or equivalent) driver's license from the applicant's state of residence or the ability to perform work at locations outside of the office.

### PROBATIONARY PERIOD:

Individuals appointed to a position in this class will be required to serve a probationary period of six (6) months, during which time performance will be carefully evaluated. Continuation in this class will be contingent upon successful completion of the probationary period.

### MEDICAL EXAM PROTOCOL: Limited Core Exam.

**NOTE:** Engineer positions assigned to the Montgomery County Fire and Rescue Service as "Fire Protection Engineers" require a Core Exam with a Drug/Alcohol Screen. Call OMS for clarification when assignment known.

Class Established: December 1973

**Revised:** July 1980

August 1987

Classification Study: February 1995 (M) Classification Study: February 2003 (M)

March 2008

June 2013

August 2013